

RULES AND REGULATIONS FOR CONTROL OF SOURCES OF IONIZING RADIATION  
DRAFT OF CHANGES – REVISIONS UNRELATED TO NEW SECTION 12

**SECTION 2.  
LICENSING OF RADIOACTIVE MATERIALS**

**PART A.  
GENERAL**

RH-100. **Authority.**

Act 8 of Second Extraordinary ~~Special~~ Session of 1961, as amended.

RH-102. **~~License Requirement~~ Purpose and Scope.**

- a. Section 2, Part I to Section 3, Part J to Section 3, and Sections 7 through 9 provide for the licensing of radioactive material. Except for persons exempt as provided in Part C to Section 2 and RH-750., no person shall manufacture, produce, transfer, receive, acquire, own, possess, or use radioactive material except as authorized in a specific or general license issued in accordance with these Regulations.<sup>1/</sup>
- b. In addition to the requirements of this Section, all licensees, except as otherwise noted in these Regulations, are subject to the requirements of Section 3 and Section 4 of these Regulations as well as any regulations specific to the type of radioactive material or particle accelerator use. Licensees engaged in industrial radiographic operations are subject to the requirements in Part I to Section 3; licensees engaged in well logging and subsurface tracer studies are subject to the requirements in Part J to Section 3; licensees using Naturally Occurring Radioactive Material (NORM) are subject to the requirements in Section 7; licensees using irradiators are subject to the requirements in Section 8; and licensees using radionuclides in the healing arts are subject to the requirements in Section 9. Particle accelerators are licensed pursuant to Section 6, with use requirements found in Sections 6 and 11.

RH-104. **Communications.**

Except where otherwise specified, All communications concerning these Regulations ~~shall~~ may be addressed to the Arkansas Department of Health, Radiation Control Section ~~Chief~~, 4815 West Markham Street, ~~Mail~~ Slot # 30, Little Rock, Arkansas 72205-3867.

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**RH-105. Interpretations.**

Except as specifically authorized by the Department in writing, no interpretations of the meaning of the regulations in this Section by an officer or employee of the Department other than a written interpretation by the Department Director or designee will be recognized as binding upon the Department.

RH-105~~6~~.- RH-199. Reserved.

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**PART B.**  
**DEFINITIONS**

RH-200. **Definitions.**

**Act** - Act 8 of Second Extraordinary ~~Special~~ Session of 1961, as amended.

**Agreement State** - Any state with which the Atomic Energy Commission or the U.S. Nuclear Regulatory Commission has entered into an effective agreement under ~~sub~~Section 274 b. of the Atomic Energy Act of 1954 (68 Stat. 919), as amended (73 Stat. 689) including any amendments thereto. Non-agreement State means any other State.

**Becquerel (Bq)** – One becquerel is equal to one disintegration per second (dps).

**Curie (Ci)** – One curie is that amount of radioactive material which disintegrates at the rate of 37 billion atoms per second.

**Government agency** - Any executive department, commission, independent establishment, corporation, wholly or partly owned by the United States of America, which is an instrumentality of the United States, or any board, bureau, division, service, office, officer, authority, administration, or other establishment in the executive branch of the Government.

**Person** - ~~Any individual, corporation, partnership, firm, agency, political subdivision of this state, any other state or political subdivision or agency thereof and any legal successor, representative, agent or agency of the foregoing, other than the U.S. Nuclear Regulatory Commission and other federal government agencies.~~

1. Any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, Government agency other than the U.S. Nuclear Regulatory Commission or the U.S. Department of Energy (except that the DOE shall be considered a person within the meaning of the regulations in 10 CFR chapter I to the extent that its facilities and activities are subject to the licensing and related regulatory authority of the NRC under section 202 of the Energy Reorganization Act of 1974 (88 Stat. 1244), the Uranium Mill Tailings Radiation Control Act of 1978 (92 Stat. 3021), the Nuclear Waste Policy Act of 1982 (96 Stat. 2201), and section 3(b)(2) of the Low-Level Radioactive Waste Policy Amendments Act of 1985 (99 Stat. 1842)), any State or any political subdivision of or any political entity within a State, any foreign government or nation or any political subdivision of any such government or nation, or other entity; and

2. Any legal successor, representative, agent, or agency of the foregoing.

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**Principal activities** - Activities authorized by the license which are essential to achieving the purpose(s) for which the license was issued or amended. Storage during which no licensed material is accessed for use or disposal and activities incidental to decontamination or decommissioning are not principal activities.

**Special nuclear material** -

1. Plutonium, Uranium-233, Uranium enriched in the isotope 233 or in the isotope 235, and any other material that the U.S. Nuclear Regulatory Commission, pursuant to the provisions of Section 51 of the Atomic Energy Act of 1954, as amended, determines to be special nuclear material, but does not include source material, or
2. Any material artificially enriched by any of the foregoing but does not include source material.

**Special nuclear material in quantities not sufficient to form a critical mass** - Uranium enriched in the isotope 235 in quantities not exceeding 350 grams of contained Uranium-235; Uranium-233 in quantities not exceeding 200 grams; Plutonium in quantities not exceeding 200 grams or any combination of them in accordance with the following formula:

For each kind of special nuclear material, determine the ratio between the quantity of that special nuclear material and the quantity specified above for the same kind of special nuclear material. The sum of such ratios for all of the kinds of special nuclear material in combination shall not exceed “1” (i.e., unity). For example, the following quantities in combination would not exceed the limitation and are within the formula, as follows:

$$\frac{175 \text{ (grams contained U-235)}}{350} + \frac{50 \text{ (grams U-233)}}{200} + \frac{50 \text{ (grams Pu)}}{200} = 1$$

**Unrefined and unprocessed ore** - Ore in its natural form prior to any processing, such as grinding, roasting, beneficiating or refining. Processing does not include sieving or encapsulation of ore or preparation of samples for laboratory analysis.

**PART C.  
EXEMPTIONS**

RH-300. **Unimportant Quantities of Source Material.**

- a. Any person is exempt from ~~these Regulations~~ this Section to the extent that such person receives, possesses, uses, ~~or owns, transfers, or delivers~~

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source material in any chemical mixture, compound, solution, or alloy in which the source material is by weight less than 1/20 of one (1) percent (0.05%) of the mixture, compound, solution, or alloy.

b. Any person is exempt from this ~~Regulation~~ Section to the extent that such person receives, possesses, uses, or transfers unrefined and unprocessed ore containing source material; provided that, except as authorized in a specific license, such person shall not refine or process such ore.

c. 1. Any person is exempt from this ~~regulation~~ Section and Section 3 to the extent that such person receives, possesses, uses, or transfers:

1.A. Any ~~quantity~~ quantities of ~~T~~thorium contained in:

A.i. Incandescent gas mantles;

B.ii. Vacuum tubes;

C.iii. Welding rods;

D.iv. Electric lamps for illuminating purposes, provided that each lamp does not contain more than fifty (50) milligrams of ~~T~~thorium;

E.v. Germicidal lamps, sunlamps, and lamps for outdoor or industrial lighting, provided that each lamp does not contain more than two (2) grams of ~~T~~thorium;

F.vi. Rare earth metals and compounds, mixtures, and products containing not more than 0.25% percent by weight ~~T~~thorium, ~~U~~uranium, or any combination of these; or

G.vii. Personnel neutron dosimeters, provided that each dosimeter does not contain more than fifty (50) milligrams of ~~T~~thorium;

RH-300.c.1. (Cont'd)

2.B. Source material contained in the following products:

A.i. Glazed ceramic tableware manufactured before August 27, 2013, provided that the glaze contains not more than twenty percent (20%) ~~percent~~ by weight source material;

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- ~~B.ii.~~ Piezoelectric ceramic containing not more than two percent (2%) ~~percent~~ by weight source material;
- iii. Glassware containing not more than two percent (2%) by weight source material or, for glassware manufactured before August 27, 2013, 10 percent (10%) by weight source material; but not including commercially manufactured glass brick, pane glass, ceramic tile, or other glass or ceramic used in construction; or
- iv. Glass enamel or glass enamel frit containing not more than ten percent (10%) by weight source material imported or ordered for importation into the United States, or initially distributed by manufacturers in the United States, before July 25, 1983;
- 3.C. Photographic film, negatives, and prints containing ~~U~~ranium or ~~T~~horium;
- 4.D. Any finished product or part fabricated of, or containing ~~T~~ungsten or ~~M~~agnesium-~~T~~horium alloys, provided that the ~~T~~horium content of the alloy does not exceed four percent (4%) ~~percent~~ by weight and that the exemption contained in this subparagraph RH-300.c.1.D. shall not be deemed to authorize the chemical, physical, or metallurgical treatment or processing of any such product or part; and
- 5.E. Uranium contained in counterweights installed in aircraft, rockets, projectiles, and missiles or stored or handled in connection with installation or removal of such counterweights, provided that:

  - A. ~~The counterweights are manufactured in accordance with a specific license issued by the Department, the U.S. Nuclear Regulatory Commission or any Agreement State authorizing distribution by the licensee pursuant to this subparagraph or equivalent regulations of the NRC or any Agreement State;~~
  - B.i. Each counterweight has been impressed with the following legend clearly legible through any plating or other covering: “**DEPLETED URANIUM**”;<sup>2/</sup>

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€.ii. Each counterweight is durably and legibly labeled or marked with the identification of the manufacturer and the statement **“UNAUTHORIZED ALTERATIONS PROHIBITED”**,<sup>2/</sup> and

Đ.iii. The exemption contained in ~~this subparagraph~~ RH-300.c.1.E. shall not be deemed to authorize the chemical, physical, or metallurgical treatment or processing of any such counterweights other than repair or restoration of any plating or other covering;

RH-300.c.1. (Cont'd)

6.F. ~~Uranium used as shielding constituting part of any shipping container which is conspicuously and legibly impressed with the legend “CAUTION – RADIOACTIVE SHIELDING – URANIUM” and which meets the specifications for containers for radioactive materials prescribed by Section 173.426 or 173.428 of 49 CFR Part 173 of the regulations published by the U.S. Department of Transportation.~~

Natural or depleted uranium metal used as shielding constituting part of any shipping container, provided that:

i. The shipping container is conspicuously and legibly impressed with the legend “CAUTION - RADIOACTIVE SHIELDING - URANIUM”; and

ii. The uranium metal is encased in mild steel or equally fire resistant metal of minimum wall thickness of one-eighth inch (3.2 mm);

7.G. ~~Thorium or uranium contained in or on finished optical lenses and mirrors, provided that each lens or mirror does not contain more than thirty (30%) ten percent (10%) by weight of Thorium or uranium or, for lenses manufactured before August 27, 2013, 30 percent (30%) by weight of thorium; and that the exemption contained in this subparagraph RH-300.c.1.G. shall not be deemed to~~ does not authorize either:

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- A.i. The shaping, grinding, or polishing of such lens or mirror or manufacturing processes other than the assembly of such lens or mirror into optical systems and devices without any alteration of the lens or mirror; or
- B.ii. The receipt, possession, use, or transfer of uranium or Thorium contained in contact lenses, or in spectacles, or in eyepieces in binoculars or other optical instruments;
8. ~~Uranium contained in detector heads for use in fire detection units, provided that each detector head contains not more than 0.005 microcuries of Uranium.~~
- 9.H. Thorium contained in any finished aircraft engine part containing nickel-thoria alloy, provided that:
- A.i. The ~~Thorium~~ is dispersed in the nickel-thoria alloy in the form of finely divided thoria (thorium dioxide); and
- B.ii. The ~~Thorium~~ content in the nickel-thoria alloy does not exceed four percent (4%) ~~percent~~ by weight.
- d.2. The exemptions contained in RH-300.c.1. ~~shall not be deemed to do not authorize the manufacture, processing or production of any of the products described herein.~~
3. No person may initially transfer for sale or distribution a product containing source material to persons exempt under RH-300.c.1., or equivalent regulations of the Nuclear Regulatory Commission or of an Agreement State, unless authorized by a license issued under 10 CFR 40.52 to initially transfer such products for sale or distribution.
- (i) Persons initially distributing source material in products covered by the exemptions in RH-300.c.1. before August 27, 2013, without specific authorization may continue such distribution for 1 year beyond this date. Initial distribution may also be continued until the NRC takes final action on a pending application for license or license amendment to specifically authorize distribution submitted no later than 1 year beyond this date.



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- (ii) Persons authorized to manufacture, process, or produce these materials or products containing source material by the Department or any Agreement State, and persons who import finished products or parts, for sale or distribution must be authorized by a license issued under 10 CFR 40.52 for distribution only and are exempt from the requirements of Section 3 and RH-404.a. and b.

RH-304. **Other Specific Exemptions.**

The Department may, upon application ~~therefore~~ of any interested person or upon its own initiative, grant such exemptions ~~or exceptions~~ from the requirements of ~~these Regulations~~ the regulations in this Section as it determines are authorized by law and will not result in undue hazard to public health and safety or property, and are otherwise in the public interest.

**PART D.  
LICENSES**

RH-401. **General Licenses - Source Material.**

**a. Small quantities of source material.**

- a.1. ~~A general license is hereby issued authorizing use and transfer of not more than fifteen (15) pounds of source material at any one time by persons in the following categories:~~
1. ~~Pharmacists using the source material solely for the compounding of medicinals;~~
  2. ~~Physicians using the source material for medicinal purposes;~~
  3. ~~Persons receiving possession of source material from pharmacists and physicians in the form of medicinals or drugs;~~
  4. ~~Commercial and industrial firms and research, educational and medical institutions for research, development, educational or commercial purposes; provided, that no person shall, pursuant to this general license, receive more~~

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~~than a total of 150 pounds of source material in any one (1) calendar year.~~

A general license is hereby issued authorizing commercial and industrial firms; research, educational, and medical institutions; and Federal, State, and local government agencies to receive, possess, use, and transfer uranium and thorium, in their natural isotopic concentrations and in the form of depleted uranium, for research, development, educational, commercial, or operational purposes in the following forms and quantities:

- A. No more than 1.5 kg (3.3 lb) of uranium and thorium in dispersible forms (e.g., gaseous, liquid, powder, etc.) at any one time. Any material processed by the general licensee that alters the chemical or physical form of the material containing source material must be accounted for as a dispersible form. A person authorized to possess, use, and transfer source material under paragraph a.1.A. may not receive more than a total of 7 kg (15.4 lb) of uranium and thorium in any one calendar year. Persons possessing source material in excess of these limits as of *[the effective date of these regulations]*, may continue to possess up to 7 kg (15.4 lb) of uranium and thorium at any one time for one year beyond this date, or until the Department takes final action on a pending application submitted on or before *[the effective date of these regulations plus one year]*, for a specific license for such material; and receive up to 70 kg (154 lb) of uranium or thorium in any one calendar year until *[December 31 of the year after the regulations become effective]*, or until the Department takes final action on a pending application submitted on or before *[the effective date of these regulations plus one year]*, for a specific license for such material; and
- B. No more than a total of 7 kg (15.4 lb) of uranium and thorium at any one time. A person authorized to possess, use, and transfer source material under paragraph a.1.B. may not receive more than a total of 70 kg (154 lb) of uranium and thorium in any one calendar year. A person may not alter the chemical or physical form of the source material possessed under paragraph a.1.B. unless it is accounted for under the limits found in paragraph a.1.A.; or
- C. No more than 7 kg (15.4 lb) of uranium, removed during the treatment of drinking water, at any one time. A person may not remove more than 70 kg (154 lb) of uranium from

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drinking water during a calendar year under paragraph a.1.C.; or

D. No more than 7 kg (15.4 lb) of uranium and thorium at laboratories for the purpose of determining the concentration of uranium and thorium contained within the material being analyzed at any one time. A person authorized to possess, use, and transfer source material under paragraph a.1.D. may not receive more than a total of 70 kg (154 lb) of source material in any one calendar year.

2. Any person who receives, possesses, uses, or transfers source material in accordance with the general license in paragraph a. of this section:

A. Is prohibited from administering source material, or the radiation therefrom, either externally or internally, to human beings except as may be authorized by the Department in a specific license.

B. Shall not abandon such source material. Source material may be disposed of as follows:

i. A cumulative total of 0.5 kg (1.1 lb) of source material in a solid, non-dispersible form may be transferred each calendar year, by a person authorized to receive, possess, use, and transfer source material under this general license to persons receiving the material for permanent disposal. The recipient of source material transferred under the provisions of paragraph a.2.B.i. is exempt from the requirements to obtain a license under this Section to the extent the source material is permanently disposed. This provision does not apply to any person who is in possession of source material under a specific license issued pursuant to these Regulations; or

ii. In accordance with RH-1400.

C. Is subject to the provisions in RH-102., 104., 105., 200., 1100., 1511.; RH-409.a. through d.; RH-500. and 501.; RH-1502.e. through g., 600. through 602.; RH-416.; and RH-700.

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- D. Shall respond to written requests from the Department to provide information relating to the general license within 30 calendar days of the date of the request, or other time frame specified in the request. If the person cannot provide the requested information within the allotted time, the person shall, within that same time period, request a longer period to supply the information by providing the Department a written justification for the request;
- E. Shall not export such source material except in accordance with 10 CFR Part 110.
3. Any person who receives, possesses, uses, or transfers source material in accordance with paragraph a. of this section shall conduct activities so as to minimize contamination of the facility and the environment. When activities involving such source material are permanently ceased at any site, if evidence of significant contamination is identified, the general licensee shall notify the Department in writing about such contamination and may consult with the Department as to the appropriateness of sampling and restoration activities to ensure that any contamination or residual source material remaining at the site where source material was used under this general license is not likely to result in exposures that exceed the limits in RH-1216.
- b.4. Any ~~P~~ persons who receives, possesses, uses or transfers source material pursuant to in accordance with the general license issued in RH-401.a. granted in paragraph a. of this section are is exempt from the provisions of Section 3 of these Regulations to the extent that such receipt, possession, use, ~~or~~ and transfer is are within the terms of such this general license; provided, except that such person shall comply with the provisions of RH-1216. and RH-1400. to the extent necessary to meet the provisions of paragraphs a.2.B. and a.3. of this section. ~~h~~However, that this exemption shall does not be deemed to apply to any such person who is also in possession of source material under holds a specific license issued pursuant to these Regulations.
5. No person may initially transfer or distribute source material to persons generally licensed under paragraph a.1.A. or a.1.B. of this section, or equivalent regulations of the Nuclear Regulatory Commission or of an Agreement State, unless authorized by a specific license issued in accordance with RH-405.b.1. or equivalent provisions of the NRC or of an Agreement State. This prohibition does not apply to analytical laboratories returning processed samples to the client who initially provided the sample.

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Initial distribution of source material to persons generally licensed by paragraph a.1. of this section before [the effective date of these regulations], without specific authorization may continue for 1 year beyond this date. Distribution may also be continued until the Department takes final action on a pending application for license or license amendment to specifically authorize distribution submitted on or before August 27, 2014.

RH-401. (Cont'd)

**e.b. Receipt of title to source material.**

A general license is hereby issued authorizing the receipt of title to source material without regard to quantity. This general license does not authorize any person to receive, possess, deliver, use, or transfer source material.

**c. Certain industrial products or devices.**

1. A general license is hereby issued to receive, acquire, possess, use, or transfer, in accordance with the provisions of paragraphs c.2. through c.5. of this section, depleted uranium contained in industrial products or devices for the purpose of providing a concentrated mass in a small volume of the product or device.

2. The general license in paragraph c.1. of this section applies only to industrial products or devices which have been manufactured or initially transferred either in accordance with a specific license issued to the manufacturer of the products or devices pursuant to RH-405.a.1. or in accordance with a specific license issued to the manufacturer by the Nuclear Regulatory Commission or an Agreement State which authorizes manufacture of the products or devices for distribution to persons generally licensed by the NRC or an Agreement State.

3. A. Persons who receive, acquire, possess, or use depleted uranium pursuant to the general license established by paragraph c.1. of this section shall file Department form "Registration Certificate - Use of Depleted Uranium Under General License" with the General License Registration Program, Radiation Control Section, Arkansas Department of Health. The form shall be submitted within 30 days after the first receipt or acquisition of such depleted uranium. Persons possessing depleted uranium pursuant to the general license in paragraph c.1. of this section as of [the effective date of these regulations] shall register the

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depleted uranium with the Department on or before [the effective date of these regulations plus one year]. The general licensee shall furnish on the form the following information and such other information as may be required by the form:

- i. Name and address of the general licensee;
- ii. A statement that the general licensee has developed and will maintain procedures designed to establish physical control over the depleted uranium described in paragraph c.1. of this section and designed to prevent transfer of such depleted uranium in any form, including metal scrap, to persons not authorized to receive the depleted uranium; and
- iii. Name and title, address, and telephone number of the individual duly authorized to act for and on behalf of the general licensee in supervising the procedures identified in paragraph c.3.A.ii. of this section.

B. The general licensee possessing or using depleted uranium under the general license established by paragraph c.1. of this section shall report in writing to the Department any changes in information originally furnished by the licensee in Department form "Registration Certificate - Use of Depleted Uranium Under General License." The report shall be submitted within 30 days after the effective date of such change.

4. A person who receives, acquires, possesses, or uses depleted uranium pursuant to the general license established by paragraph c.1. of this section:

A. Shall not introduce such depleted uranium, in any form, into a chemical, physical, or metallurgical treatment or process, except a treatment or process for repair or restoration of any plating or other covering of the depleted uranium;

B. Shall not abandon such depleted uranium;

C. Shall transfer or dispose of such depleted uranium only by transfer in accordance with the provisions of Part E to

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Section 2 and RH-1400. In the case where the transferee receives the depleted uranium pursuant to the general license established by paragraph c.1. of this section, the transferor shall furnish the transferee a copy of paragraph c. of this section and a copy of Department form "Registration Certificate - Use of Depleted Uranium Under General License." In the case where the transferee receives the depleted uranium pursuant to a general license of the Nuclear Regulatory Commission or an Agreement State that is equivalent to paragraph c., the transferor shall furnish the transferee a copy of paragraph c. and a copy of Department form "Registration Certificate - Use of Depleted Uranium Under General License" accompanied by a note explaining that use of the product or device is regulated by the governing agency, the agency who has jurisdiction where the product or device will be in use, under requirements substantially the same as those in paragraph c.; and

D. Shall report in writing to the Department, within 30 days of any transfer, the name and address of the person receiving the depleted uranium pursuant to such transfer.

5. Any person receiving, acquiring, possessing, using, or transferring depleted uranium pursuant to the general license established by paragraph c.1. of this section is exempt from the requirements of Section 3 of these Regulations with respect to the depleted uranium covered by that general license.

RH-404. **General Requirements for the Issuance of Specific Licenses.**

a.——A license application will be approved if the Department determines that:

- 1a. The applicant is qualified by reason of training and experience to use the material in question for the purpose requested in accordance with Section 3 of these Regulations in such a manner as to minimize danger to public health and safety or property;
- 2b. The applicant's proposed equipment, facilities and procedures are adequate to protect health and minimize danger to public health and safety or property;
- 3c. The issuance of the license will not be inimical to the health and safety of the public;

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- 4d. The applicant satisfies any applicable special requirements contained in Section 2, Section 3, Sections 7, Section 8, and Section through 9, and Section 12 of these Regulations; and
- 5e. In the case of an application for a license to receive and possess radioactive material for the conduct of any activity which the Department determines will significantly affect the quality of the environment, the Director of the Arkansas Department of Health, or his/her designee, before commencement of construction of the plant or facility in which the activity will be conducted, on the basis of information filed and evaluations made pursuant to Subpart A, “National Environmental Policy Act – Regulations Implementing Section 102(2),” of 10 CFR Part 51, has concluded, after weighing the environmental, economic, technical, and other benefits against environmental costs and considering available alternatives, that the action called for is the issuance of the proposed license, with any appropriate conditions to protect environmental values. Commencement of construction prior to such conclusion shall be grounds for denial of a license to receive and possess radioactive material in such plant or facility. Commencement of construction as defined in RH-200. may include non-construction activities if the activity has a reasonable nexus to radiological safety and security.

**b. ~~Applications for exemptions.~~**

~~The Department may, upon application therefore or upon its own initiative, grant such exemptions or exceptions from the requirements of these Regulations as it determines are authorized by law and will not result in undue hazard to public health and safety or to property.~~

**c. ~~Orders.~~**

~~The Department may, by order, impose upon any licensee or registrant such requirements, issued in furtherance of these Regulations, as it deems appropriate or necessary to protect health or minimize danger to life or property.~~

**RH-405. Special Requirements for the Issuance of Certain Specific Licenses.**

~~a. d. Deleted.~~

**a. Licensing of the manufacture and initial transfer of industrial products and devices containing depleted uranium.**



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**1. Special requirements for issuance of specific licenses under RH-405.a.1.**

- A. An application for a specific license to manufacture industrial products and devices containing depleted uranium, or to initially transfer such products or devices, for use pursuant to RH-401.c. or equivalent regulations of the Nuclear Regulatory Commission or an Agreement State, will be approved if:
- i. The applicant satisfies the general requirements specified in RH-404.;
  - ii. The applicant submits sufficient information relating to the design, manufacture, prototype testing, quality control procedures, labeling or marking, proposed uses, and potential hazards of the industrial product or device to provide reasonable assurance that possession, use, or transfer of the depleted uranium in the product or device is not likely to cause any individual to receive in one (1) year a radiation dose in excess of ten percent (10%) of the annual limits specified in RH-1200.a.; and
  - iii. The applicant submits sufficient information regarding the industrial product or device and the presence of depleted uranium for a mass-volume application in the product or device to provide reasonable assurance that unique benefits will accrue to the public because of the usefulness of the product or device.
- B. In the case of an industrial product or device whose unique benefits are questionable, the Department will approve an application for a specific license under this paragraph only if the product or device is found to combine a high degree of utility and low probability of uncontrolled disposal and dispersal of significant quantities of depleted uranium into the environment.
- C. The Department may deny an applicant for a specific license under this paragraph if the end uses of the industrial product or device cannot be reasonably foreseen.

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**2. Conditions of specific licenses issued pursuant to RH-405.a.1.**

Each person licensed pursuant to RH-405.a.1. shall:

- A. Maintain the level of quality control required by the license in the manufacture of the industrial product or device, and in the installation of the depleted uranium into the product or device;
- B. Label or mark each unit to:
  - i. Identify the manufacturer or initial transferor of the product or device and the number of the license under which the product or device was manufactured or initially transferred, the fact that the product or device contains depleted uranium, and the quantity of depleted uranium in each product or device; and
  - ii. State that the receipt, possession, use, and transfer of the product or device are subject to a general license or the equivalent and the regulations of the NRC or of an Agreement State;
- C. Assure that the depleted uranium before being installed in each product or device has been impressed with the following legend clearly legible through any plating or other covering: "**DEPLETED URANIUM**";
- D. i. Furnish a copy of the general license contained in RH-401.c. and a copy of Department form "Registration Certificate - Use of Depleted Uranium Under General License" to each person to whom the licensee transfers depleted uranium in a product or device for use pursuant to the general license contained in RH-401.c.; or
  - ii. Furnish a copy of the general license contained in the NRC's or Agreement State's regulation equivalent to RH-401.c. and a copy of the NRC's or Agreement State's certificate, or alternately, furnish a copy of the general license contained in RH-401.c. and a copy of Department form "Registration Certificate - Use of Depleted Uranium Under General License" to each person to whom the licensee transfers depleted uranium in a product or

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device for use pursuant to the general license of the NRC or an Agreement State. If a copy of the general license in RH-401.c. and a copy of Department form "Registration Certificate - Use of Depleted Uranium Under General License" are furnished to such person, they shall be accompanied by a note explaining that use of the product or device is regulated by the NRC or an Agreement State, depending on which agency has jurisdiction where the product or device will be in use, under requirements substantially the same as those in RH-401.c.;

- E. i. Report to the Department all transfers of industrial products or devices to persons for use under the general license in RH-401.c. Such report shall identify each general licensee by name and address, an individual by name and title who may constitute a point of contact between the Department and the general licensee, the type and model number of device transferred, and the quantity of depleted uranium contained in the product or device. The report shall be submitted within 30 days after the end of each calendar quarter in which such a product or device is transferred to the generally licensed person. If no transfers have been made to persons generally licensed under RH-401.c. during the reporting period, the report shall so indicate;
- ii. Report to the agency where the product or device will be in use, the NRC or an Agreement State, all transfers of industrial products or devices to persons for use under the general license in the NRC's or an Agreement State's regulations equivalent to RH-401.c. Such report shall identify each general licensee by name and address, an individual by name and title who may constitute a point of contact between the agency and the general licensee, the type and model number of device transferred, and the quantity of depleted uranium contained in the product or device. The report shall be submitted within 30 days after the end of each calendar quarter in which such product or device is transferred to the generally licensed person. If no transfers have been made to NRC general licensees or to general licensees within a particular

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Agreement State during the reporting period, this information shall be reported to the NRC or to the responsible Agreement State agency upon request of the appropriate governing agency; and

F. Keep records showing the name, address, and a point of contact for each general licensee to whom the licensee transfers depleted uranium in industrial products or devices for use pursuant to the general license provided in RH-401.c. or equivalent regulations of the NRC or an Agreement State. The records shall be maintained for three (3) years from the date of transfer and shall show the date of each transfer, the quantity of depleted uranium in each product or device transferred, and compliance with the report requirements of this paragraph.

**b. Licensing of the initial transfer of source material for use under the “small quantities of source material” general license.**

**1. Special requirements for issuance of specific licenses under RH-405.b.1.**

An application for a specific license to initially transfer source material for use under RH-401.a., or equivalent regulations of the Nuclear Regulatory Commission or an Agreement State, will be approved if:

- A. The applicant satisfies the general requirements specified in RH-404.; and
- B. The applicant submits adequate information on, and the Department approves the methods to be used for quality control, labeling, and providing safety instructions to recipients.

**2. Conditions of specific licenses issued pursuant to RH-405.b.1.**

- A. Each person licensed under RH-405.b.1. shall label the immediate container of each quantity of source material with the type of source material and quantity of material and the words, "RADIOACTIVE MATERIAL."
- B. Each person licensed under RH-405.b.1. shall ensure that the quantities and concentrations of source material are as labeled and indicated in any transfer records.

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C. Each person licensed under RH-405.b.1. shall provide the information specified in paragraph b.2.C. of this section to each person to whom source material is transferred for use under RH-401.a. or equivalent provisions in NRC or Agreement State regulations. This information must be transferred before the source material is transferred for the first time in each calendar year to the particular recipient. The required information includes:

- i. A copy of RH-401.a. and Part E to Section 2, or relevant equivalent regulations of the NRC or an Agreement State; and
- ii. Appropriate radiation safety precautions and instructions relating to handling, use, storage, and disposal of the material.

D. Each person licensed under RH-405.b.1 shall report transfers as follows:

i. File a report with the Department. The report shall include the following information:

- (a). The name, address, and license number of the person who transferred the source material;
- (b). For each general licensee under RH-401.a. or equivalent NRC or Agreement State provisions to whom greater than 50 grams (0.11 lb) of source material has been transferred in a single calendar quarter, the name and address of the general licensee to whom source material is distributed; a responsible agent, by name and/or position and phone number, of the general licensee to whom the material was sent; and the type, physical form, and quantity of source material transferred; and
- (c). The total quantity of each type and physical form of source material transferred in the reporting period to all such generally licensed recipients.

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- ii. File a report with the NRC and each responsible Agreement State agency that identifies all persons, operating under provisions equivalent to RH-401.a., to whom greater than 50 grams (0.11 lb) of source material has been transferred within a single calendar quarter. The report shall include the following information specific to those transfers made to NRC jurisdiction or to the Agreement State being reported to:
- (a). The name, address, and license number of the person who transferred the source material;
- (b). The name and address of the general licensee to whom source material was distributed; a responsible agent, by name and/or position and phone number, of the general licensee to whom the material was sent; and the type, physical form, and quantity of source material transferred; and
- (c). The total quantity of each type and physical form of source material transferred in the reporting period to all such generally licensed recipients within NRC jurisdiction or within the Agreement State, as appropriate.
- iii. Submit each report by January 31 of each year covering all transfers for the previous calendar year. If no transfers were made to persons generally licensed under RH-401.a. or equivalent NRC or Agreement State provisions during the current period, a report shall be submitted to the Department indicating so. If no transfers have been made to NRC general licensees or to general licensees within a particular Agreement State during the reporting period, this information shall be reported to the NRC or to the responsible Agreement State agency upon request of the appropriate governing agency.
- E. Each person licensed under RH-405.b.1. shall maintain all information that supports the reports required by this paragraph concerning each transfer to a general licensee for

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a period of three (3) years after the event is included in a report to the Department, the NRC, or to an Agreement State agency.

c. – d. Reserved.

e. **Licensing of the manufacture or initial transfer of devices to persons generally licensed under RH-402.a. ...**

RH-405.

f. **~~Licensing of the use of sealed sources in industrial radiography.~~**

~~A specific license for use of sealed sources in industrial radiography will be issued only if:~~

1. ~~— The applicant satisfies the general requirements specified in Part D, RH-404.; and~~

2. ~~— The applicant will have an adequate program for training radiographers and radiographers' assistants and submits to the Department a schedule or description of such program which specifies the:~~

A. ~~— Initial training;~~

B. ~~— Periodic training;~~

C. ~~— On the job training;~~

D. ~~— Means to be used by the licensee to determine the radiographer's knowledge and understanding of, and ability to comply with, Department Regulations and licensing requirements and the operating and emergency procedures of the applicant; and~~

E. ~~— Means to be used by the licensee to determine the radiographer's assistant's knowledge and understanding of, and ability to comply with, the operating and emergency procedures of the applicant; and~~

3. ~~— The applicant has established and submits to the Department satisfactory written operating and emergency procedures as described in RH-1802.e.; and~~

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4. ~~The applicant has established and submits to the Department a description of its internal audit program in accordance with RH-1802.b.; and~~
5. ~~The applicant submits to the Department a description of his overall organizational structure pertaining to the industrial radiography program including specified delegations of authority and responsibility for operation of the program; and~~

RH 405.f. (Cont'd)

6. ~~The applicant who desires to conduct his own leak tests has established adequate procedures to be followed in leak testing sealed sources for possible leakage and contamination and submits to the Department a description of such procedures including:~~
  - A. ~~Instrumentation to be used;~~
  - B. ~~Methods of performing test, e.g., points on equipment to be smeared and method of taking smear; and~~
  - C. ~~Pertinent experience of the person who will perform the tests.~~

Deleted. See RH-1800.b.2.

RH-406. **Special Requirements for Specific Licenses of Broad Scope.**

This section prescribes requirements for the issuance of specific licenses of broad scope for radioactive material (“broad licenses”)  and certain regulations governing holders of such licenses.

- a. The different types of broad licenses are set forth below: ...



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**PART E.**  
**TRANSFER OF MATERIAL**

**RH-500. Authorization for Transfer.**

No licensee shall transfer radioactive material except as authorized pursuant to this Part.

**RH-501. Conditions of Transfer.**

- a. Except as otherwise provided in the license and subject to the provisions of paragraphs b. and c. of this section, Any licensee may transfer radioactive material, subject to acceptance by the transferee, to:
- a.1. The Department;
  - b.2. The U.S. Department of Energy, ~~the U.S. Nuclear Regulatory Commission or any successor thereto;~~
  - c.3. Any person exempt from these Regulations to the extent permitted under such exemption;
  - d.4. Any person ~~licensed~~ authorized to receive such material under terms of a general license or its equivalent or specific license or equivalent licensing document issued by the Department, the U.S. Nuclear Regulatory Commission (NRC), or any Agreement State or to any person otherwise authorized to receive such material by the Federal Government or any agency thereof, ~~or the Department, or any other state having an agreement with the U.S. Nuclear Regulatory Commission, pursuant to Section 274 of the Atomic Energy Act of 1954, as amended an Agreement State;~~ or
  - e.5. Any other person authorized by the Department in writing.
- f. b. Before transferring radioactive material to a specific licensee of the Department, the ~~U.S. Nuclear Regulatory Commission (NRC),~~ or an Agreement State, or to a general licensee who is required to register with the Department, the NRC, or an Agreement State prior to receipt of the radioactive material, the licensee transferring the material shall verify that the transferee's license authorizes the receipt of the type, form, and quantity of radioactive material to be transferred.

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RH-501. (Cont'd)

~~g.c.~~ The following methods for the verification required by RH-501.~~f.b.~~ are acceptable:

1. The transferor may have in his possession, and read, a current copy of the transferee's specific license or registration certificate.
2. The transferor may have in his possession a written certification by the transferee that he is authorized by license or registration certificate to receive the type, form, and quantity of radioactive material to be transferred, specifying the license or registration certificate number, issuing agency, and expiration date;
3. For emergency shipments the transferor may accept oral certification by the transferee that he is authorized by license or registration certificate to receive the type, form, and quantity of radioactive material to be transferred, specifying the license or registration certificate number, issuing agency, and expiration date; provided, that the oral certification is confirmed in writing within ten (10) days;
4. The transferor may obtain other sources of information compiled by a reporting service from official records of the Department, the NRC, or the licensing agency of an Agreement State as to the identity of licensees and the scope and expiration dates of licenses and registrations; or
5. When none of the methods of verification in RH-501.~~g.c.1. to~~ through 4. are readily available or when a transferor desires to verify that information received by one of such methods is correct or up-to-date, the transferor may obtain and record confirmation from the Department, the NRC, or the licensing agency of an Agreement State that the transferee is licensed to receive the radioactive material.

RH-502. **Preparation of Material and Transport.**

Preparation for shipment and transport of radioactive material shall be in accordance with the provisions of RH-3004. of these Regulations.

RH-503.- RH-599. Reserved.

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**PART F.**  
**RECORDS, INSPECTIONS, AND TESTS**

RH-600. **Records.**

- a. Each person who receives ~~a source of radiation~~ radioactive material pursuant to a license ~~or registration~~ under issued pursuant to the regulations in this Section, Part I to Section 3, Part J to Section 3, and Sections 6, 7, 8, and 9 of these Regulations shall keep records showing the receipt, transfer, and disposal of ~~such sources of radiation~~ the radioactive material as follows:
1. The licensee ~~or registrant~~ shall retain each record of receipt of radioactive material ~~or a source of ionizing radiation~~ as long as the material ~~or source~~ is possessed and for three (3) years following transfer or disposal of the material ~~or source of radiation~~.
  2. The licensee ~~or registrant~~ who transferred the material ~~or source of radiation~~ shall maintain each record of transfer for three (3) years after each transfer unless a specific requirement in another part of these Regulations dictates otherwise.
  3. The licensee ~~or registrant~~ who disposed of the material ~~or source of radiation~~ shall retain each record of disposal of radioactive material ~~or source of radiation~~ until the Department terminates each license ~~or registration~~ that authorizes disposal of the material ~~or source of radiation~~.
  4. If radioactive material is combined or mixed with other licensed material and subsequently treated in a manner that makes direct correlation of a receipt record with a transfer, export, or disposition record impossible, the licensee may use evaluative techniques (such as first-in-first-out) to make the records that are required by this Section account for 100 percent (100%) of the material received.
- b. ~~Each~~ The licensee or registrant shall retain each record that is required by the regulations in this Section, Part I to Section 3, Part J to Section 3, and Sections 6, 7, 8, and 9 of these Regulations or by license condition for the period specified by the appropriate regulation or license condition. If a retention period is not otherwise specified by regulation or license condition, the record must be retained until the Department terminates

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each license ~~or registration~~ that authorizes the activity that is subject to the recordkeeping requirement.

RH-600. (Cont'd)

- c.
  - 1. Records which must be maintained pursuant to this Section, Part I to Section 3, Part J to Section 3, and Sections ~~6~~, 7, 8, and 9 of these Regulations may be the original or a reproduced copy or microform if such reproduced copy or microform is duly authenticated by authorized personnel and the microform is capable of producing a clear and legible copy after storage for the period specified by Department regulations. The record may also be stored in electronic media with the capability for producing legible, accurate, and complete records during the required retention period. Records such as letters, drawings, specifications, must include all pertinent information such as stamps, initials, and signatures. The licensee ~~or registrant~~ shall maintain adequate safeguards against tampering with and loss of records.
  - 2. If there is a conflict between the Department's regulations in this Section, Part I to Section 3, Part J to Section 3, and Sections ~~6~~, 7, 8, and 9 of these Regulations, license condition, or other written Department approval or authorization pertaining to the retention period for the same type of record, the retention period specified in the regulations in this Section, Part I to Section 3, Part J to Section 3, and Sections ~~6~~, 7, 8, and 9 of these Regulations for such records shall apply unless the Department, pursuant to RH-304., has granted a specific exemption from the record retention requirements specified in the regulations in this Section, Part I to Section 3, Part J to Section 3, and Sections ~~6~~, 7, 8, and 9 of these Regulations.
- d. Prior to license termination, each licensee authorized to possess radioactive material with a half-life greater than 120 days, in an unsealed form, shall forward the following records to the Department:
  - 1. Records of disposal of licensed material made under RH-1401., RH-1402., a previous RH-1403. that authorized certain burials<sup>11/</sup>, RH-1404., RH-1405., RH-1408.; and
  - 2. Records required by RH-1500.c.2.D.
- e. If licensed activities are transferred or assigned in accordance with RH-409.b., each licensee authorized to possess radioactive material, with a half-life greater than 120 days, in an unsealed form, shall transfer the

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following records to the new licensee and the new licensee will be responsible for maintaining these records until the license is terminated:

1. Records of disposal of licensed material made under RH-1401., RH-1402., a previous RH-1403. that authorized certain burials<sup>11/</sup>, RH-1404., RH-1405., RH-1408.; and
  2. Records required by RH-1500.c.2.D.
- f. Prior to license termination, each licensee shall forward the records required by RH-409.h.7. to the Department.

RH-601. **Inspections.**

- a. Each licensee shall afford, ~~at all reasonable times,~~ to the Department at all reasonable times opportunity to inspect radioactive materials and the ~~installation premises and facilities~~ wherein such radioactive materials ~~are~~ is used or stored.
- b. Each licensee shall make available to the Department for inspection, upon reasonable notice, records kept by the licensee pursuant to these Regulations.

**PART G.  
ENFORCEMENT**

RH-700. a. **Violations.**

~~Any person who violates any of the provisions of the Act or rules, regulations or orders in effect pursuant thereto, of the Department, shall, upon conviction thereof, be punished by a fine of not less than one hundred dollars (\$100.00) nor more than two thousand dollars (\$2,000.00) or by imprisonment for not more than six (6) months or be both fined and imprisoned.~~

An injunction or other court order may be obtained prohibiting any violation of any provision of the Act or any regulation or order issued thereunder. Any person who willfully violates any provision of the Act or any regulation or order issued thereunder may be guilty of a felony, misdemeanor, or crime and, upon conviction, may be punished by fine or imprisonment or both, as provided by law. Arkansas Code Annotated §20-21-204 describes criminal and civil penalties which may be assessed.

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b. **Impounding.**

Sources of radiation shall be subject to impounding pursuant to Section 5 of these Regulations.

**PART H.  
RECIPROCITY**

RH-751. **Additional Requirements.**

The Department may, by rule, regulation, or order, impose upon any licensee such requirements in addition to those established in ~~these Regulations~~ the regulations in this Section as it deems appropriate or necessary to minimize danger to public health and safety or property.

**FOOTNOTES TO SECTION 2**

<sup>1/</sup> Attention is directed to the fact that regulation by the State of source material, byproduct material, and special nuclear material in quantities not sufficient to form a critical mass is subject to the provisions of the agreement between the State and the U.S. Nuclear Regulatory Commission and to 10 CFR Part 150 of the Commission's regulations.

<sup>2/</sup> The requirements specified in RH-300.c.5.B. and C. 300.c.1.E.i. and ii. need not be met by counterweights manufactured prior to December 31, 1969, provided that such counterweights are impressed with the legend, "**CAUTION : RADIOACTIVE MATERIAL - URANIUM**," as previously required by these Regulations.

<sup>11/</sup> ~~Authority to transfer possession or control by the manufacturer, processor or producer of any equipment, device, commodity or other product containing source or byproduct material whose subsequent possession, use, transfer and disposal by all other persons are exempted from regulatory requirements may be obtained only from the Department.~~

A previous RH-1403. permitted certain burials of small quantities of licensed materials in soil before January 1, 1983, without specific Department authorization. As of January 1, 1983, these burials had to receive specific approval by the Department, in accordance with the revised RH-1403. Disposal by burial in soil came to be regulated under RH-1401.

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**SECTION 3.**  
**STANDARDS FOR PROTECTION AGAINST RADIATION**

**PART A.**  
**GENERAL**

RH-1003. **Communications.**

Except where otherwise specified, All communications concerning these Regulations ~~should~~ may be addressed to the Arkansas Department of Health, Radiation Control Section Chief, 4815 West Markham Street, Mail Slot # 30, Little Rock, Arkansas 72205-3867.

**PART B.**  
**DEFINITIONS**

RH-1100. **Definitions.**

**Agreement State** - Any state with which the Atomic Energy Commission or the U.S. Nuclear Regulatory Commission has entered into an effective agreement under ~~sub~~Section 274 b. of the Atomic Energy Act of 1954 (68 Stat. 919), as amended (73 Stat. 689) including any amendments thereto. Non-agreement State means any other State.

**Becquerel (Bq)** – One becquerel is equal to one disintegration per second (dps).

**Curie (Ci)** – One curie is that amount of radioactive material which disintegrates at the rate of 37 billion atoms per second.

**License** - Except where otherwise specified, ~~means~~ a license issued by the Department in accordance with the regulations adopted by the Department pursuant to these Regulations.

**Person** - Any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, agency, political subdivision of this State, any other State or political subdivision or agency thereof and any legal successor, representative, agent or agency of the foregoing, other than the U.S. Nuclear Regulatory Commission and other federal government agencies.

1. Any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, Government agency other than the U.S. Nuclear Regulatory Commission or the U.S. Department of Energy (except that the DOE shall be considered a person within the meaning of

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the regulations in 10 CFR chapter I to the extent that its facilities and activities are subject to the licensing and related regulatory authority of the NRC under section 202 of the Energy Reorganization Act of 1974 (88 Stat. 1244), the Uranium Mill Tailings Radiation Control Act of 1978 (92 Stat. 3021), the Nuclear Waste Policy Act of 1982 (96 Stat. 2201), and section 3(b)(2) of the Low-Level Radioactive Waste Policy Amendments Act of 1985 (99 Stat. 1842)), any State or any political subdivision of or any political entity within a State, any foreign government or nation or any political subdivision of any such government or nation, or other entity; and

2. Any legal successor, representative, agent, or agency of the foregoing.

**Special nuclear material -**

1. Plutonium, Uranium-233, Uranium enriched in the isotope 233 or in the isotope 235, and any other material that the ~~Department~~ U.S. Nuclear Regulatory Commission, pursuant to the provisions of Section 51 of the Atomic Energy Act of 1954, as amended, determines to be special nuclear material, but does not include source material, or
2. Any material artificially enriched by any of the foregoing but does not include source material.

RH-1104. **Interpretations.**

Except as specifically authorized by the Department in writing, no interpretations of the meaning of the ~~R~~regulations in this Section by an officer or employee of the Department other than a written interpretation by the Department Director or designee will be recognized ~~to be~~ as binding upon the Department.

**PART D.  
PRECAUTIONARY PROCEDURES**

RH-1303.

b. **Posting requirements.**

3. **Posting of Very High Radiation Areas.**

The licensee or registrant shall post each very high radiation area with a conspicuous sign or signs bearing the radiation symbol and the words "GRAVE DANGER ~~(not required to use the word~~



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~~GRAVE, this may be omitted), VERY HIGH RADIATION AREA.”~~

**PART F.**  
**RECORDS, REPORTS, NOTIFICATIONS, AND TESTS**

RH-1500. ...

**h. Records of waste disposal.**

1. Each licensee or registrant shall maintain records of the disposal of licensed materials made under RH-1401., RH-1402., a previous RH-1403. that authorized certain burials<sup>8/</sup>, RH-1404., RH-1405., and RH-1408., and disposal by burial in soil, including burials authorized before January 28, 1981.<sup>8/</sup>
2. The licensee or registrant shall retain the records required by paragraph h.1. of this section until the Department terminates each pertinent license requiring the record. Requirements for disposition of these records, prior to license termination, are located in RH-600.

RH-1509. **Reports of Individual Monitoring.**

- a. This section applies to each person licensed by the Department to:
1. Possess or use radioactive material for purposes of radiography pursuant to Part I of Section 3; or
  2. Possess or use at any time, for processing or manufacturing for distribution pursuant to Section 2 of these Regulations, radioactive material in quantities exceeding any one of the following quantities:

**TABLE TO RH-1509.a.2.**

<b>Radionuclide</b>	<b>Quantity of Radionuclide<sup>a</sup> in Curies</b>
Cesium-137	1
Cobalt-60	1
Gold-198	100

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Iodine-131	1
Iridium-192	10
Krypton-85	1,000
Promethium-147	10
Technetium-99m	1,000

- <sup>a</sup> The Department may require as a license condition, or by rule, Regulation, or order pursuant to RH-404.e2001., reports from licensees who are licensed to use radionuclides not on this list, in quantities sufficient to cause comparable radiation levels.
- b. Each licensee in a category listed in RH-1509.a. shall complete an annual report of the results of individual monitoring carried out by the licensee for each individual for whom monitoring was required by RH-1302. during that year. The licensee may include additional data for individuals for whom monitoring was provided but not required. The licensee shall use Department Form Y (Appendix I to Section 3) or electronic media containing all the information required by Department Form Y.
- c. The licensee shall complete the report required by RH-1509.b., covering the preceding year, on or before May 31 of each year. The licensee shall retain the report and submit it, if requested, to the Arkansas Department of Health, Radiation Control Section Chief, 4815 West Markham Street, Mail Slot # 30, Little Rock, Arkansas 72205-3867.

**PART I.**

**LICENSES FOR INDUSTRIAL RADIOGRAPHY AND RADIATION SAFETY**  
**REQUIREMENTS FOR INDUSTRIAL RADIOGRAPHIC OPERATIONS**

**RH-1800. General Provisions.**

**a. Purpose and scope.**

1. The Regulations in this Part prescribe requirements for the issuance of licenses for the industrial use of sealed sources in industrial radiography and establish radiation safety requirements for persons utilizing sources of radiation for in industrial radiography. The requirements of this Part are in addition to and not in substitution for other applicable requirements of these Regulations. The regulations in this Part apply to all licensees or registrants who use sources of radiation for industrial radiography. Except for the regulations in this Part clearly applicable only to sealed radioactive sources - radiation machines, accelerators, and

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sealed radioactive sources are covered by this Part. The provisions of this Part do not apply to medical uses of sources of radiation.

b. ~~Scope.~~

2. The requirements of this Part are in addition to, and not in substitution for, other applicable requirements of these Regulations. The Regulations in this Part apply to all licensees or registrants who use sources of radiation for industrial radiography. Except for the Regulations in this Part clearly applicable only to sealed radioactive sources—radiation machines, accelerators, and sealed radioactive sources are covered by this Part. The provisions of this Part are not applicable to systems designed exclusively for microscopic examination of material, e.g., x-ray diffraction, spectroscopic and electron microscope equipment, or to systems for intentional exposure of humans to x-rays. In particular, requirements in Sections 1, 2, 3, 4, 6, and 12 of these Regulations apply to applicants, licensees, and registrants subject to this Part.

RH-405.f. b. Specific licensing provisions.

1. Application for a specific license.

A person, as defined in RH-1100., shall file an application for a specific license authorizing the use of sealed sources in industrial radiography in accordance RH-403. and RH-404.

2. Licensing of the use of sealed sources in Specific licenses for industrial radiography.

An application for a A specific license for the use of sealed sources licensed material in industrial radiography will be issued only approved if:

1.A. The applicant satisfies the general requirements specified in Part D, RH-404., as applicable, and any special requirements contained in this Part; and

2.B. The applicant will have submits an adequate program for training radiographers and radiographers' assistants and submits to the Department a schedule or description of such program which specifies the that meets the requirements of RH-1802.b.;

A. ~~Initial training;~~

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- B. ~~Periodic training;~~
- C. ~~On the job training;~~
- D. ~~Means to be used by the licensee to determine the radiographer's knowledge and understanding of, and ability to comply with, Department Regulations and licensing requirements and the operating and emergency procedures of the applicant; and~~
- E. ~~Means to be used by the licensee to determine the radiographer's assistant's knowledge and understanding of, and ability to comply with, the operating and emergency procedures of the applicant; and~~
- C. The applicant submits adequate procedures for verifying and documenting the certification status of radiographers and for ensuring that the certification of individuals acting as radiographers remains valid;
- 3.D. ~~The applicant has established and submits to the Department satisfactory written operating and emergency procedures as described in RH-1802.e.; and~~
- 4.E. ~~The applicant has established and submits to the Department a description of its internal audit a program for inspections of the job performance of each radiographer and radiographer's assistant at intervals not to exceed 6 months as described in accordance with RH-1802.b.5.; and~~
- 5.F. ~~The applicant submits to the Department a description of his the applicant's overall organizational structure pertaining as it applies to the radiation safety responsibilities to the in industrial radiography program, including specified delegations of authority and responsibility for operation of the program; and~~
- G. The applicant submits the qualifications of the individual(s) designated as the Radiation Safety Officer as described in RH-1802.d.;
- 6.H. ~~The applicant who desires intends to conduct collect his own leak tests samples of sealed sources or exposure devices containing depleted uranium (DU) shielding has established adequate described the procedures to be~~

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~~followed in leak testing sealed sources for possible leakage and contamination and submits to the Department a description of such procedures including for performing the sampling and the qualifications of the individual(s) authorized to do the sampling. If the applicant intends to analyze its own wipe samples, the application shall include a description of the procedures to be followed. The description shall include the:~~

~~A.i. Instrumentation to be used;~~

~~B.ii. Methods of performing test, e.g., points on equipment to be smeared and method of taking smear; and the analysis; and~~

~~C.iii. Pertinent experience of the person individual(s) who will perform the tests analyze the wipe samples.~~

~~I. The applicant who intends to perform calibrations of survey instruments and/or alarming ratemeters describes methods to be used and the experience of the individual(s) who will perform the calibrations. All calibrations must be performed according to the procedures described and at the intervals prescribed in RH-1801.e.3. and RH-1802.f.7.D.~~

~~J. The applicant identifies and describes the location(s) of all field stations and permanent radiographic installations; and~~

~~K. The applicant identifies the locations(s) where all records required by this Part and other Sections of these Regulations will be maintained.~~

c. **Definitions.** ...

**PART J.**  
**LICENSES AND RADIATION SAFETY REQUIREMENTS FOR WIRELINE SERVICE**  
**OPERATIONS AND SUBSURFACE TRACER STUDIES**

RH-1991. **Applications for Specific Exemptions.**

The Department may, upon application of any interested person or upon its own initiative, grant such exemptions from the requirements of the Regulations in this Part as it determines are authorized by law and will not ~~endanger life or property~~

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or the common defense and security result in undue hazard to public health and safety or property, and are otherwise in the public interest.

**PART K.**  
**EXEMPTIONS AND ADDITIONAL REQUIREMENTS**

~~RH 2000. RH 2001. Deleted. Refer to RH 404.b. and RH 404.c.~~

RH-2000. **Specific Exemptions.**

The Department may, upon application of any interested person or upon its own initiative, grant such exemptions from the requirements of the regulations in this Section as it determines are authorized by law and will not result in undue hazard to public health and safety or property, and are otherwise in the public interest.

RH-2001. **Additional Requirements.**

The Department may, by rule, regulation, or order, impose upon any licensee such requirements in addition to those established in the regulations in this Section as it deems appropriate or necessary to minimize danger to public health and safety or property.

**PART L.**  
**ENFORCEMENT**

**RH-2110. **Violations.****

- a. ~~Any person who violates any of the provisions of the Act or rules, regulations or orders in effect pursuant thereto of the Department shall, upon conviction thereof, be punished by a fine of not less than one hundred dollars (\$100.00) nor more than two thousand dollars (\$2,000.00) or by imprisonment for not more than six (6) months or be both so fined and imprisoned.~~

An injunction or other court order may be obtained prohibiting any violation of any provision of the Act or any regulation or order issued thereunder. Any person who willfully violates any provision of the Act or any regulation or order issued thereunder may be guilty of a felony, misdemeanor, or crime and, upon conviction, may be punished by fine or

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imprisonment or both, as provided by law. Arkansas Code Annotated §20-21-204 describes criminal and civil penalties which may be assessed.

b. **Impounding.**

Sources of radiation shall be subject to impounding pursuant to Section 5 of these Regulations.

**APPENDIX H TO SECTION 3**

**QUANTITIES<sup>a/</sup> OF LICENSED ~~OR REGISTERED~~ MATERIAL REQUIRING LABELING**  
*(In order of atomic number)*

**FOOTNOTES TO SECTION 3**

<sup>8/</sup> A previous RH-4071403, permitted certain burials of small quantities of licensed materials in soil before January-28 1, 1984<sup>3</sup>, without specific Department authorization. As of January 1, 1983, these burials had to receive specific approval by the Department, in accordance with the revised RH-1403. Disposal by burial in soil came to be regulated under RH-1401.

**SECTION 4.**  
**TRANSPORTATION OF RADIOACTIVE MATERIALS**

**PART A.**  
**GENERAL**

RH-3003. **Communications and Records.**

- a. Except where otherwise specified, All communications concerning these Regulations shall may be addressed to the Arkansas Department of Health, Radiation Control Section, 4815 West Markham Street, Slot # 30, Little Rock, Arkansas 72205-3867.

RH-3006. **Interpretations.**

Except as specifically authorized by the Department in writing, no interpretations of the meaning of the regulations in this Section by an officer or employee of the Department other than a written interpretation by the Department Director or designee will be recognized as binding upon the Department.

RH-3006~~7~~.- RH-3099. Reserved.

**PART B.**  
**DEFINITIONS**

RH-3100. **Definitions.**

**Carrier** - A person engaged in the transportation of passengers or property by land or water as a common, ~~or~~ contract, or private carrier, or by civil aircraft.



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**PART C.  
EXEMPTIONS**

RH-3200. **Specific Exemptions.**

~~On application of any interested person or on its own initiative, the Department may grant any exemption from the requirements of the regulations in this Section that it determines is authorized by law and will not endanger life or property nor the common defense and security.~~

The Department may, upon application of any interested person or upon its own initiative, grant such exemptions from the requirements of the regulations in this Section as it determines are authorized by law and will not result in undue hazard to public health and safety or property, and are otherwise in the public interest.

**PART G.  
QUALITY ASSURANCE**

RH-3609.- RH-39699. Reserved.

**PART H.  
ENFORCEMENT**

RH-3700. **Violations.**

a. An injunction or other court order may be obtained prohibiting any violation of any provision of the Act or any regulation or order issued thereunder. Any person who willfully violates any provision of the Act or any regulation or order issued thereunder may be guilty of a felony, misdemeanor, or crime and, upon conviction, may be punished by fine or imprisonment or both, as provided by law. Arkansas Code Annotated §20-21-204 describes criminal and civil penalties which may be assessed.

b. **Impounding.**

Sources of radiation shall be subject to impounding pursuant to Section 5 of these Regulations.

RH-3701.- RH-3999. Reserved.

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**SECTION 5.  
RULES OF PRACTICE**

**PART A.  
GENERAL**

RH-4003. **Communications.**

- a. Except where otherwise specified, All communications concerning ~~this~~ these Regulations shall may be addressed to the Arkansas Department of Health, Radiation Control Section, 4815 West Markham Street, Mail Slot # 30, Little Rock, Arkansas 72205-3867.

RH-4004. ~~Reserved.~~

**Interpretations.**

Except as specifically authorized by the Department in writing, no interpretations of the meaning of the regulations in this Section by an officer or employee of the Department other than a written interpretation by the Department Director or designee will be recognized as binding upon the Department.

**SECTION 6.**  
**LICENSES AND RADIATION SAFETY REQUIREMENTS**  
**FOR PARTICLE ACCELERATORS**

**PART A.**  
**GENERAL**

RH-5004. **Communications.**

Except where otherwise specified, All communications concerning these Regulations shall may be addressed to the Arkansas Department of Health, Radiation Control Section, 4815 West Markham Street, Mail Slot # 30, Little Rock, Arkansas 72205-3867.

RH-5005. **Interpretations.**

Except as specifically authorized by the Department in writing, no interpretations of the meaning of the regulations in this Section by an officer or employee of the Department other than a written interpretation by the Department Director or designee will be recognized as binding upon the Department.

RH-50056.- RH-5099. Reserved.

**PART G.**  
**EXEMPTIONS, ADDITIONAL REQUIREMENTS,**  
**INSPECTIONS, AND TESTS**

RH-5600. **Exemptions.**

- e. The Department may, upon application ~~therefor~~ of any interested person; or upon its own initiative, grant such exemptions ~~or exceptions~~ from the requirements of ~~these Regulations~~ the regulations in this Section as it determines are authorized by law and will not result in undue hazard to public health and safety or property, and are otherwise in the public interest.

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RH-5602. **Inspections.**

- a. Each licensee shall afford to the Department at all reasonable times opportunity to inspect sources of radiation and the premises and facilities wherein such sources of radiation are used or stored.
- b. Each licensee shall make available to the Department for inspection, upon reasonable notice, records ~~maintained~~ kept by the licensee pursuant to these Regulations.

**PART H.  
ENFORCEMENT**

RH-5700. **Violations.**

- a. ~~Any person who violates any of the provisions of the Act or rules, regulations, or orders in effect pursuant thereto of the Department shall, upon conviction thereof, be punished by a fine not less than one hundred dollars (\$100.00) nor more than two thousand dollars (\$2,000.00) or by imprisonment for not more than six (6) months or be both so fined and imprisoned.~~  
An injunction or other court order may be obtained prohibiting any violation of any provision of the Act or any regulation or order issued thereunder. Any person who willfully violates any provision of the Act or any regulation or order issued thereunder may be guilty of a felony, misdemeanor, or crime and, upon conviction, may be punished by fine or imprisonment or both, as provided by law. Arkansas Code Annotated §20-21-204 describes criminal and civil penalties which may be assessed.
- b. **Impounding.**  
Sources of radiation shall be subject to impounding pursuant to Section 5 of these Regulations.

**SECTION 8.**  
**LICENSES AND RADIATION SAFETY REQUIREMENTS FOR IRRADIATORS**

**PART A.**  
**GENERAL**

**RH-7003. Communications.**

Except where otherwise specified, all communications concerning these Regulations may be addressed to the Arkansas Department of Health, Radiation Control Section, 4815 West Markham Street, Slot # 30, Little Rock, Arkansas 72205-3867.

~~RH-7003.~~ RH-7004. Reserved.

**RH-7005. Interpretations.**

Except as specifically authorized by the Department in writing, no interpretations of the meaning of the Regulations in this Section by any officer or employee of the Department, other than a written interpretation by the Department Director or designee, will be recognized to be as binding upon the Department.

**PART B.**  
**LICENSES**

**RH-7013. Specific Licenses for Irradiators.**

The Department will approve an application for a specific license for the use of licensed material in an irradiator if the applicant meets the requirements contained in this section.

- a. The applicant shall satisfy the general requirements specified in RH-404.a.1-4d. of these Regulations and the requirements contained in this Section.

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RH-7017. **Applications for Specific Exemptions.**

- a. The Department may, upon application of any interested person or upon its own initiative, grant ~~any~~ such exemptions from the requirements of the regulations in this Section that as it determines are authorized by law and will not endanger life or property or the common defense and security result in undue hazard to public health and safety or property, and are otherwise in the public interest.

**PART G.  
ENFORCEMENT**

RH-7091. **Violations.**

- a. ~~Any person who violates any of the provisions of the Act or rules, Regulations or orders in effect pursuant thereto of the Department shall, upon conviction thereof, be punished by a fine of not less than one hundred dollars (\$100.00) nor more than two thousand dollars (\$2,000.00) or by imprisonment for not more than six (6) months or be both so fined and imprisoned.~~

An injunction or other court order may be obtained prohibiting any violation of any provision of the Act or any regulation or order issued thereunder. Any person who willfully violates any provision of the Act or any regulation or order issued thereunder may be guilty of a felony, misdemeanor, or crime and, upon conviction, may be punished by fine or imprisonment or both, as provided by law. Arkansas Code Annotated §20-21-204 describes criminal and civil penalties which may be assessed.

- b. **Impounding.**

Sources of radiation shall be subject to impounding pursuant to Section 5 of these Regulations.

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**SECTION 9.**  
**USE OF RADIONUCLIDES IN THE HEALING ARTS**

**PART A.**  
**GENERAL**

**RH-8006. Communications.**

Except where otherwise specified, all communications concerning these Regulations may be addressed to the Arkansas Department of Health, Radiation Control Section, 4815 West Markham Street, Slot # 30, Little Rock, Arkansas 72205-3867.

**RH-8007. Interpretations.**

Except as specifically authorized by the Department in writing, no interpretations of the meaning of the regulations in this Section by an officer or employee of the Department other than a written interpretation by the Department Director or designee will be recognized as binding upon the Department.

**RH-8006~~8~~.** - RH-8009. Reserved.

**RH-8026. Specific Exemptions.**

The Department may, upon application of any interested person or upon its own initiative, grant such exemptions from the requirements of the regulations in this Section 9 as it determines are authorized by law and will not endanger life or property or the common defense and security result in undue hazard to public health and safety or property, and are otherwise in the public interest.

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**PART B.  
DEFINITIONS**

RH- 8100. **Definitions.**

**Agreement State** - Any state with which the Atomic Energy Commission or the U.S. Nuclear Regulatory Commission has entered into an effective agreement under ~~sub~~Section 274 b. of the Atomic Energy Act of 1954 (68 Stat. 919), as amended (73 Stat. 689) including any amendments thereto. **Non-agreement State** means any other State.

**PART D:  
GENERAL TECHNICAL REQUIREMENTS**

RH-8420. **Release of Individuals Containing ~~Radioactive Drugs or Implants~~ Unsealed Radioactive Material or Implants Containing Radioactive Material.**

- a. ~~A licensee may authorize the release from its control of any individual who has been administered Iodine-131 as Sodium Iodide if:~~
1. ~~The total patient concentration has been determined to be 1.22 gigabecquerels (33 millicuries) or less; or~~
  2. ~~If the total effective dose equivalent to any other individual from exposure to the released individual is not likely to exceed five (5) millisievert (0.5 rem) per year and criteria outlined in Arkansas<sup>2</sup> **Standard for Radiological Protection for Release of Patient Administered I-131 Sodium Iodide** have been met.~~
- b. ~~A licensee may authorize the release from its control of any individual who has been administered unsealed radioactive material (other than Iodine-131 as Sodium Iodide) or implants containing radioactive material if the total effective dose equivalent to any other individual from exposure to the released individual is not likely to exceed five (5) millisievert (0.5 rem) per year.~~

**NOTE:** ~~The current revision of NUREG-1556, Vol.9, "Consolidated Guidance About Medical Licenses," describes methods for calculating doses to other individuals and contains tables of activities not likely to cause doses exceeding 5 mSv (0.5 rem).~~

- a. A licensee may authorize the release from its control of any individual who has been administered unsealed radioactive material or implants



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containing radioactive material if the total effective dose equivalent to any other individual from exposure to the released individual is not likely to exceed 0.5 rem (5 mSv) per year.

- e b. A licensee shall provide the released individual, or the individual's parent or guardian, with oral and written instructions on actions recommended to maintain doses to other individuals as low as is reasonably achievable if the total effective dose equivalent to any other individual is likely to exceed 0.1 rem (1 mSv). ~~If the total effective dose equivalent to a breast-feeding infant or child could receive a radiation dose as a result of the release of the patient~~ exceed 0.1 rem (1 mSv) assuming there were no interruption of breast-feeding, the instructions shall also include:
1. Guidance on the interruption or discontinuation of breast-feeding; and
  2. Information on the potential consequences, if any, of failure to follow the guidance.
- d c. Release of the ~~patient individual~~ must shall be directly approved by an authorized user listed on the ~~Department~~ license, if the release requires a record under RH-8710. ~~This individual~~ The authorized user must be approved for the use of the type of radioactive material for which the patient individual being released has received.
- e d. ~~The licensee shall maintain a r~~Records of the basis for authorizing the release of an individual shall be retained in accordance with RH-8710.
- f e. ~~The licensee shall maintain a r~~Records of instructions provided to ~~a breast-feeding women~~ woman shall be retained in accordance with RH-8710.
- g. ~~Notwithstanding RH-8420.a., the licensee may be held financially responsible for the proper disposal of any individual's radioactive waste discovered in a solid waste stream that can be traced to the licensee.~~
- h. ~~The licensee shall immediately notify the Department in accordance with RH-8803. if a patient departs prior to an authorized release.~~
- i. ~~The licensee shall notify the Department in accordance with RH-8804:~~
1. ~~When they are aware that a patient containing radioactive material and who has been released in accordance with RH-8420. dies; and~~
  2. ~~If it is possible that any individual could receive exposures in excess of five (5) millisievert (500 mrem) as a result of the deceased's body.~~

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**PART F:**  
**UNSEALED RADIOACTIVE MATERIAL –**  
**WRITTEN DIRECTIVE REQUIRED**

**RH-8552. Safety Precautions.**

- a. For each patient or human research subject receiving radiopharmaceutical therapy and hospitalized for compliance with RH-8420., a licensee shall:
  1. Quarter the patient or the human research subject either in:
    - A. A private room with a private sanitary facility; or
    - B. A room, with a private sanitary facility, with another individual who also has received similar radiopharmaceutical therapy and who cannot be released in accordance with RH-8420.; and,
  2. Visibly post the patient's or the human research subject's room with a "Radioactive Materials" sign and note on the door or in the patient's or human research subject's chart where and how long visitors may stay in the patient's or the human research subject's room; and
  3. Either monitor material and items removed from the patient's or the human research subject's room to determine that their radioactivity cannot be distinguished from the natural background radiation level with a radiation detection survey instrument set on its most sensitive scale and with no interposed shielding, or handle such material and items as radioactive waste.
- b. The Radiation Safety Officer, or his or her designee, and ~~the~~ an authorized user shall be notified immediately if the ~~hospitalized~~ patient or human research subject dies or has a medical emergency. ~~The licensee shall also notify the Department in accordance with RH-8804. if it is possible that any individual could receive exposures in excess of RH-1208. of these regulations as a result of the deceased's body.~~

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**PART G:  
MANUAL BRACHYTHERAPY**

**RH-8603. Safety Instruction.**

In addition to the requirements of RH-2803. ~~of these regulations:~~

- a. The licensee shall provide radiation safety instruction, initially and at least annually, to personnel caring for patients or human research subjects that are undergoing implant therapy and cannot be released in accordance with RH-8420. Instruction must be commensurate with the duties of the personnel and shall include the following:
  1. Size and appearance of the brachytherapy sources;
  2. Safe handling and shielding instructions;
  3. Patient or human research subject control;
  4. Visitor control, including both:
    - A. Routine visitation of hospitalized individuals in accordance with RH-1208.a.1. ~~of these regulations;~~ and
    - B. Visitation authorized in accordance with RH-1208.c. ~~of these regulations;~~ and
  5. Notification of the Radiation Safety Officer, or his or her designee, and an authorized user if the patient or the human research subject dies or has a medical emergency. ~~The licensee shall also notify the Department in accordance with RH-8804. if it is possible that any individual could receive exposures in excess of five (5) millisievert (500 mrem) as a result of the deceased's body.~~
- b. ~~A licensee shall retain a r~~Records of individuals receiving instruction shall be maintained in accordance with RH-8715.

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**PART M:  
RECORDS**

RH-8710. **Records of the Release of Individuals Containing Unsealed Radioactive Material ~~Drugs~~ or Implants Containing Radioactive Material.**

- a. A licensee shall retain a record, signed by the authorized user, of the basis for authorizing the release of an individual pursuant to RH-8420.a., for three (3) years after the date of release, if the total effective dose equivalent is calculated by:
  - A. Using the retained activity rather than the activity administered;
  - B. Using an occupancy factor less than 0.25 at 1 meter;
  - C. Using the biological or effective half-life; or
  - D. Considering the shielding by tissue.
- b. A licensee shall retain a record, ~~for three (3) years after the date of release~~ that the instructions required by RH-8420.e.b. were provided to a breast-feeding woman if the radiation dose to the infant or child from continued breast-feeding could result in a total effective dose equivalent exceeding 0.1 rem (1 mSv).
- c. Records required by paragraphs a. and b. of this section shall be retained for three (3) years after the date of release of the individual.

**PART N:  
REPORTS**

RH-8803. **~~Reports of Patient Departure Prior to Authorized Release.~~**

- a. ~~The licensee shall notify the Department by telephone immediately upon discovery that a patient or human research subject has departed from the licensee's facility without authorization under RH 8420.a.~~
- b. ~~The license shall submit a written report to the Department within thirty (30) days after discovery of the unauthorized departure. The written report must include:~~

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1. ~~\_\_\_\_\_ The licensee's name;~~
2. ~~\_\_\_\_\_ The date and time of the unauthorized departure;~~
3. ~~\_\_\_\_\_ The projected date and time when release would have occurred;~~
4. ~~\_\_\_\_\_ The address of the patient's or human research subject's home or anticipated destination following departure;~~
5. ~~\_\_\_\_\_ The radionuclide, chemical and physical form and calculated activity at time of release;~~
6. ~~\_\_\_\_\_ The apparent reason(s) for the departure prior to authorized release; and~~
7. ~~\_\_\_\_\_ A description of any changes in the licensee's patient release criteria or patient instructions that are designed to avoid a recurrence of such an event.~~

Deleted.

RH-8804. **~~Notification of Deceased Patients or Human Research Subjects Containing Radioactive Material.~~**

- a. ~~\_\_\_\_\_ The licensee shall notify the Department by telephone immediately upon discovery that a patient or human research subject containing radioactive material has died, and it is possible that any individual could receive exposures in excess of RH 1208. of these regulations as a result of the deceased's body.~~
- b. ~~\_\_\_\_\_ The licensee shall submit a written report to the Department within thirty (30) days after discovery that the patient or human research subject referenced in RH 8804.a. has died. The written report must include:~~
  1. ~~\_\_\_\_\_ The licensee's name;~~
  2. ~~\_\_\_\_\_ The date of death;~~
  3. ~~\_\_\_\_\_ The radionuclide, chemical and physical form and calculated activity at time of death; and~~
  4. ~~\_\_\_\_\_ The names (or titles) and address(es) of known individuals who might have received exposures exceeding five (5) millisieverts (500 mrem).~~

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Deleted.

RH-8805.- RH-89899. Reserved.

**PART O:  
ENFORCEMENT**

**RH-8900. Violations.**

a. An injunction or other court order may be obtained prohibiting any violation of any provision of the Act or any regulation or order issued thereunder. Any person who willfully violates any provision of the Act or any regulation or order issued thereunder may be guilty of a felony, misdemeanor, or crime and, upon conviction, may be punished by fine or imprisonment or both, as provided by law. Arkansas Code Annotated §20-21-204 describes criminal and civil penalties which may be assessed.

b. **Impounding.**

Sources of radiation shall be subject to impounding pursuant to Section 5 of these Regulations.

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**SECTION 11.**  
**THERAPEUTIC RADIATION MACHINES**

**PART A.**  
**GENERAL**

RH-10003.   **Communications.**

Except where otherwise specified, all communications concerning these Regulations may be addressed to the Arkansas Department of Health, Radiation Control Section, 4815 West Markham Street, Slot # 30, Little Rock, Arkansas 72205-3867.

RH-10004.   **Interpretations.**

Except as specifically authorized by the Department in writing, no interpretations of the meaning of the regulations in this Section by an officer or employee of the Department other than a written interpretation by the Department Director or designee will be recognized as binding upon the Department.

RH-10005.   **Specific Exemptions.**

The Department may, upon application of any interested person or upon its own initiative, grant such exemptions from the requirements of the regulations in this Section as it determines are authorized by law and will not result in undue hazard to public health and safety or property, and are otherwise in the public interest.

RH-10003~~6~~.- RH-10099. Reserved.

**PART D.**  
**TECHNICAL REQUIREMENTS**

RH-10309.- RH-109~~3~~99. Reserved.

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**PART E.**  
**[RESERVED]**

RH-10400.- RH-10499. Reserved.

**PART F.**  
**ENFORCEMENT**

RH-10500. **Violations.**

- a. An injunction or other court order may be obtained prohibiting any violation of any provision of the Act or any regulation or order issued thereunder. Any person who willfully violates any provision of the Act or any regulation or order issued thereunder may be guilty of a felony, misdemeanor, or crime and, upon conviction, may be punished by fine or imprisonment or both, as provided by law. Arkansas Code Annotated §20-21-204 describes criminal and civil penalties which may be assessed.

b. **Impounding.**

Sources of radiation shall be subject to impounding pursuant to Section 5 of these Regulations.

RH-10501.- RH-10999. Reserved.